```
=> file biosis caba caplus embase japio lifesci medline scisearch
=> e bisen prakash/au
E1            7     BISEN P S */AU
E2            4     BISEN P S DR/AU
E3            2 --> BISEN PRAKASH/AU
E4          124     BISEN PRAKASH S/AU
E5            1     BISEN PRAKASH S PROF/AU
E6           32     BISEN PRAKASH SINGH/AU
E7           33     BISEN PS/AU
E8            1     BISEN R/AU
E9           24     BISEN R K/AU
E10          12     BISEN R S/AU
E11           1     BISEN RUTH/AU
E12           1     BISEN S/AU

=> s e1-e7 and tuberculosis and diagnos?
L1           20 ("BISEN P S *"/AU OR "BISEN P S DR"/AU OR "BISEN PRAKASH"/AU OR
                "BISEN PRAKASH S"/AU OR "BISEN PRAKASH S PROF"/AU OR "BISEN PRAK
                ASH SINGH"/AU OR "BISEN PS"/AU) AND TUBERCULOSIS AND DIAGNOS?

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2             7 DUP REM L1 (13 DUPLICATES REMOVED)

=> s l2 and glycolipid?
L3             2 L2 AND GLYCOLIPID?

=> d bib ab kwic 1-
YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L3   ANSWER 1 OF 2  BIOSIS  COPYRIGHT (c) 2010 The Thomson Corporation  on STN
AN   2005:464785  BIOSIS <<LOGINID::20100824>>
DN   PREV200510248351
TI     ***Glycolipids***   of Mycobacterium   ***tuberculosis***   strain H37Rv
     are potential serological markers for   ***diagnosis***   of active
       ***tuberculosis***  .
AU   Tiwari, R. P.; Tiwari, Dileep; Garg, Sanjay K.; Chandra, Ramesh;
       ***Bisen, Prakash S.***   [Reprint Author]
CS   Bundelkhand Univ, JC Bose Inst Life Sci, Dept Biotechnol, Jhansi 284218,
     Uttar Pradesh, India
     prakash_bisen@hotmail.com
SO   Clinical and Diagnostic Laboratory Immunology, (MAR 2005) Vol. 12, No. 3,
     pp. 465-473.
     ISSN: 1071-412X.
DT   Article
LA   English
ED   Entered STN: 9 Nov 2005
     Last Updated on STN: 9 Nov 2005
AB   A simple and cost-effective   ***diagnostic***   tool (TB Screen Test) for
     the screening of patients with pulmonary and extrapulmonary
       ***tuberculosis***   and for differentiation of those individuals from
     individuals without   ***tuberculosis***  , other common infections, and
     healthy controls has been developed.  The serological responses of
     purified mycobacterial   ***glycolipid***   antigens were examined by a
     liposome agglutination assay.  The assay was able to detect very low
     antiglycolipid antibody concentrations in the infected individuals.  The
     sera from the   ***tuberculosis***   patient group had significantly
```

higher concentrations of antiglycolipid antibody than the sera from uninfected control subjects, with 94% sensitivity and 98.3% specificity. ***Glycolipids*** of Mycobacterium ***tuberculosis*** H37Rv antigens were isolated, purified, and characterized. After interchelation with liposome particles, these purified antigens specifically bound to the antiglycolipid antibodies present in the sera of patients with ***tuberculosis*** , resulting in the formation of a blue agglutination. This protocol clearly differentiates healthy controls and M. bovis BCG-vaccinated subjects from those with active ***tuberculosis*** . The resultant ***diagnostic*** tool, the TB Screen Test, is more economical and rapid (4 min) than other currently available products and can be used for the mass screening of a heavily afflicted population.

TI ***Glycolipids*** of Mycobacterium ***tuberculosis*** strain H37Rv are potential serological markers for ***diagnosis*** of active ***tuberculosis*** .

AU Tiwari, R. P.; Tiwari, Dileep; Garg, Sanjay K.; Chandra, Ramesh; ***Bisen, Prakash S.*** [Reprint Author]

AB A simple and cost-effective ***diagnostic*** tool (TB Screen Test) for the screening of patients with pulmonary and extrapulmonary ***tuberculosis*** and for differentiation of those individuals from individuals without ***tuberculosis*** , other common infections, and healthy controls has been developed. The serological responses of purified mycobacterial ***glycolipid*** antigens were examined by a liposome agglutination assay. The assay was able to detect very low antiglycolipid antibody concentrations in the infected individuals. The sera from the ***tuberculosis*** patient group had significantly higher concentrations of antiglycolipid antibody than the sera from uninfected control subjects, with 94% sensitivity and 98.3% specificity. ***Glycolipids*** of Mycobacterium ***tuberculosis*** H37Rv antigens were isolated, purified, and characterized. After interchelation with liposome particles, these purified antigens specifically bound to the antiglycolipid antibodies present in the sera of patients with ***tuberculosis*** , resulting in the formation of a blue agglutination. This protocol clearly differentiates healthy controls and M. bovis BCG-vaccinated subjects from those with active ***tuberculosis*** . The resultant ***diagnostic*** tool, the TB Screen Test, is more economical and rapid (4 min) than other currently available products and can be. . .

IT Major Concepts
Infection; Clinical Chemistry (Allied Medical Sciences)

IT Diseases
tuberculosis : bacterial disease, ***diagnosis***
Tuberculosis (MeSH)

IT Chemicals & Biochemicals
glycolipids ; serological markers

IT Methods & Equipment
TB Screen Test: clinical techniques, ***diagnostic*** techniques

ORGN Classifier
Mycobacteriaceae 08881

Super Taxa
Mycobacteria; Actinomycetes and Related Organisms; Eubacteria; Bacteria; Microorganisms

Organism Name
Mycobacterium bovis (species): pathogen
Mycobacterium ***tuberculosis*** (species): pathogen, strain-H37Rv

Taxa Notes
Bacteria, Eubacteria, Microorganisms

L3 ANSWER 2 OF 2 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
AN 2007510106 EMBASE <<LOGINID::20100824>>
TI Rapid liposomal agglutination card test for the detection of antigens in patients with active ***tuberculosis*** .
AU Tiwari, R.P.
CS Diagnostic Division, Nicholas Piramal India Limited, Pawane, Navi, Mumbai, India.
AU Tiwari, R.P.; Garg, S.K.; ***Bisen, Prakash S. (correspondence)***
CS Institute of Biotechnology and Allied Sciences, Seedling Academy of Design, Technology and Management, Jagatpura, Jaipur, India. psbisen@gmail.com
AU Garg, S.K.
CS Department of Biochemistry, University of Nebraska, Lincoln, NE, United States.
AU Bharmal, R.N.; Kartikeyan, S.
CS Department of Microbiology, Preventive and Social Medicine, Rajiv Gandhi Medical College, Kalwa, Thane, India.
AU ***Bisen, Prakash S. (correspondence)***
CS Bisen Biotech and Biopharma Pvt. Ltd., M-7 Laxmipuram, Transport Nagar, Gwalior 474009, India. psbisen@gmail.com
SO International Journal of Tuberculosis and Lung Disease, (Oct 2007) Vol. 11, No. 10, pp. 1143-1151.
Refs: 30
ISSN: 1027-3719 CODEN: IJTDFO
CY France
DT Journal; Article
FS 015 Chest Diseases, Thoracic Surgery and Tuberculosis
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
006 Internal Medicine
LA English
SL English; French; Spanish; Castilian
ED Entered STN: 30 Oct 2007
Last Updated on STN: 30 Oct 2007
AB SETTING: A total of 1360 subjects with clinically confirmed pulmonary and extra-pulmonary ***tuberculosis*** (TB) and other non-tuberculous conditions. OBJECTIVES: To develop a rapid, sensitive and specific ***diagnostic*** test for the detection of the ***glycolipid*** antigen of Mycobacterium ***tuberculosis*** in a variety of clinical samples. STUDY DESIGN: Affinity-purified rabbit anti- ***glycolipid*** antibodies (IgG) were coupled to liposome particles (0.2-0.4 .mu.m) in the presence of 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide hydrochloride and N-hydroxysuccinamide to prepare the working reagent of the TB/M card test. RESULTS: Antibody-conjugated liposomes, when determined with the ***glycolipid*** antigens present in the specimens, formed a dark blue agglutination within 4 min. No dumping was observed in samples from normal healthy subjects or patients with other diseases. The test was shown to be effective in detecting ***glycolipid*** antigens of M. ***tuberculosis*** in clinical samples from patients with active TB with as low as 1 ng/ml analytical sensitivity, 97.4% clinical sensitivity and 96.9% specificity. CONCLUSION: The TB/M card test was found to be comparatively economical (4 Indian Rupees or US$ 0.09/test), rapid (4 min) and seems fairly useful for mass testing of a variety of biological

specimens (cerebrospinal, pleural and synovial fluids, serum, tissue biopsy extract) from patients with tuberculous meningitis, pulmonary TB and other extra-pulmonary TB in endemic countries. .COPYRGT. 2007 The Union.

TI Rapid liposomal agglutination card test for the detection of antigens in patients with active ***tuberculosis*** .

AU Tiwari, R.P.; Garg, S.K.; ***Bisen, Prakash S. (correspondence)***

CS Institute of Biotechnology and Allied Sciences, Seedling Academy of Design, Technology and Management, Jagatpura, Jaipur, India

AU ***Bisen, Prakash S. (correspondence)***

CS Bisen Biotech and Biopharma Pvt. Ltd., M-7 Laxmipuram, Transport Nagar, Gwalior 474009, India. psbisen@gmail.com

AB SETTING: A total of 1360 subjects with clinically confirmed pulmonary and extra-pulmonary ***tuberculosis*** (TB) and other non-tuberculous conditions. OBJECTIVES: To develop a rapid, sensitive and specific ***diagnostic*** test for the detection of the ***glycolipid*** antigen of Mycobacterium ***tuberculosis*** in a variety of clinical samples. STUDY DESIGN: Affinity-purified rabbit anti- ***glycolipid*** antibodies (IgG) were coupled to liposome particles (0.2-0.4 .mu.m) in the presence of 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide hydrochloride and N-hydroxysuccinamide to prepare the working reagent of the TB/M card test. RESULTS: Antibody-conjugated liposomes, when determined with the ***glycolipid*** antigens present in the specimens, formed a dark blue agglutination within 4 min. No dumping was observed in samples from normal healthy subjects or patients with other diseases. The test was shown to be effective in detecting ***glycolipid*** antigens of M. ***tuberculosis*** in clinical samples from patients with active TB with as low as 1 ng/ml analytical sensitivity, 97.4% clinical sensitivity and. . .

CT Medical Descriptors:

adolescent
adult
*agglutination test
*antigen detection
article
cerebrospinal fluid
controlled study
    diagnostic test
    extrapulmonary tuberculosis
human
    lung tuberculosis
major clinical study
    Mycobacterium tuberculosis
pleura fluid
priority journal
school child
sensitivity and specificity
synovial fluid
    ****tuberculosis***
tuberculous meningitis
1 (3 dimethylaminopropyl) 3 ethylcarbodiimide
amide
antibody conjugate
    glycolipid
liposome
n hydroxysuccinamide

```
     tissue extract


=> e tiwari ram/au
E1            1     TIWARI RAKESH VALLABHDAS/AU
E2           28     TIWARI RAKSHA/AU
E3            5 --> TIWARI RAM/AU
E4           60     TIWARI RAM C/AU
E5            1     TIWARI RAM C DR/AU
E6           15     TIWARI RAM D/AU
E7           11     TIWARI RAM DAS/AU
E8            2     TIWARI RAM KRISHNA/AU
E9            8     TIWARI RAM MOHAN/AU
E10          21     TIWARI RAM P/AU
E11           1     TIWARI RAM P DR/AU
E12           9     TIWARI RAM PARKASH/AU

=> s e1-e12 and tuberculosis and diagnos?
L4            4 ("TIWARI RAKESH VALLABHDAS"/AU OR "TIWARI RAKSHA"/AU OR "TIWARI
                RAM"/AU OR "TIWARI RAM C"/AU OR "TIWARI RAM C DR"/AU OR "TIWARI
                RAM D"/AU OR "TIWARI RAM DAS"/AU OR "TIWARI RAM KRISHNA"/AU OR
                "TIWARI RAM MOHAN"/AU OR "TIWARI RAM P"/AU OR "TIWARI RAM P DR"/
                AU OR "TIWARI RAM PARKASH"/AU) AND TUBERCULOSIS AND DIAGNOS?

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5            1 DUP REM L4 (3 DUPLICATES REMOVED)

=> d

L5   ANSWER 1 OF 1  BIOSIS  COPYRIGHT (c) 2010 The Thomson Corporation  on STN
     DUPLICATE 1
AN   2004:37606  BIOSIS <<LOGINID::20100824>>
DN   PREV200400038179
TI   Analysis of the shotgun expression library of the Mycobacterium
       ***tuberculosis***   genome for immunodominant polypeptides: Potential
use
     in serodiagnosis.
AU   Bisen, Prakash S. [Reprint Author]; Garg, Sanjay K.;   ***Tiwari, Ram***
  ***     P.***  ; Tagore, P. Ravindra Nath; Chandra, Ramesh; Karnik, Rucha;
Thaker,
     Nimesh; Desai, Nirav; Ghosh, P. K.; Fraziano, Maurizio; Colizzi, Vittorio
CS   Madhav Institute of Technology and Science, Gwalior, MP, 474 005, India
     prakash_bisen@hotmail.com
SO   Clinical and Diagnostic Laboratory Immunology, (November 2003) Vol. 10,
     No. 6, pp. 1051-1058. print.
     ISSN: 1071-412X (ISSN print).
DT   Article
LA   English
ED   Entered STN: 7 Jan 2004
     Last Updated on STN: 7 Jan 2004


=> s l5 and glycolipid?
L6            0 L5 AND GLYCOLIPID?

=> e tiwari ram pramod/au
```

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E1            1     TIWARI RAM PRAKAH/AU
E2           20     TIWARI RAM PRAKASH/AU
E3            5 --> TIWARI RAM PRAMOD/AU
E4            1     TIWARI RAMA N/AU
E5            1     TIWARI RAMA NATH/AU
E6            1     TIWARI RAMA SHANKAR/AU
E7            1     TIWARI RAMAPATI/AU
E8            1     TIWARI RAMENDRA K/AU
E9            5     TIWARI RAMESH/AU
E10           5     TIWARI RAMESH CHANDRA/AU
E11           1     TIWARI RAMJI/AU
E12          15     TIWARI RAMMOHAN/AU

=> s e3
L7            5 "TIWARI RAM PRAMOD"/AU

=> dup rem l7
PROCESSING COMPLETED FOR L7
L8             1 DUP REM L7 (4 DUPLICATES REMOVED)

=> d

L8   ANSWER 1 OF 1  BIOSIS  COPYRIGHT (c) 2010 The Thomson Corporation  on STN
     DUPLICATE 1
AN   2007:385701  BIOSIS <<LOGINID::20100824>>
DN   PREV200700390349
TI   Modern approaches to a rapid diagnosis of tuberculosis: Promises and
     challenges ahead.
AU     ***Tiwari, Ram Pramod***  ; Hattikudur, Narendra S.; Bharmal, Ramesh N.;
     Kartikeyan, S.; Deshmukh, Neeta M.; Bisen, Prakash S. [Reprint Author]
CS   Seeding Acad Design Technol and Management, Inst Biotechnol and Allied
     Sci, Jaipur 302004, Rajasthan, India
     psbisen@gmail.com
SO   Tuberculosis (Amsterdam), (MAY 2007) Vol. 87, No. 3, pp. 193-201.
     ISSN: 1472-9792.
DT   Article
     General Review; (Literature Review)
LA   English
ED   Entered STN: 11 Jul 2007
     Last Updated on STN: 11 Jul 2007


=> s liposom? and tuberculosis and glycolipid and antibod?
L9           23 LIPOSOM? AND TUBERCULOSIS AND GLYCOLIPID AND ANTIBOD?

=> dup rem l9
PROCESSING COMPLETED FOR L9
L10          10 DUP REM L9 (13 DUPLICATES REMOVED)

=> s l10 and diagnos?
L11           5 L10 AND DIAGNOS?

=> d bib ab kwic 1-
YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):y


L11  ANSWER 1 OF 5  BIOSIS  COPYRIGHT (c) 2010 The Thomson Corporation  on STN
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AN 2005:464785 BIOSIS <<LOGINID::20100824>>
DN PREV200510248351
TI Glycolipids of Mycobacterium ***tuberculosis*** strain H37Rv are potential serological markers for ***diagnosis*** of active ***tuberculosis*** .
AU Tiwari, R. P.; Tiwari, Dileep; Garg, Sanjay K.; Chandra, Ramesh; Bisen, Prakash S. [Reprint Author]
CS Bundelkhand Univ, JC Bose Inst Life Sci, Dept Biotechnol, Jhansi 284218, Uttar Pradesh, India
prakash_bisen@hotmail.com
SO Clinical and Diagnostic Laboratory Immunology, (MAR 2005) Vol. 12, No. 3, pp. 465-473.
ISSN: 1071-412X.
DT Article
LA English
ED Entered STN: 9 Nov 2005
Last Updated on STN: 9 Nov 2005
AB A simple and cost-effective ***diagnostic*** tool (TB Screen Test) for the screening of patients with pulmonary and extrapulmonary ***tuberculosis*** and for differentiation of those individuals from individuals without ***tuberculosis*** , other common infections, and healthy controls has been developed. The serological responses of purified mycobacterial ***glycolipid*** antigens were examined by a ***liposome*** agglutination assay. The assay was able to detect very low antiglycolipid ***antibody*** concentrations in the infected individuals. The sera from the ***tuberculosis*** patient group had significantly higher concentrations of antiglycolipid ***antibody*** than the sera from uninfected control subjects, with 94% sensitivity and 98.3% specificity. Glycolipids of Mycobacterium ***tuberculosis*** H37Rv antigens were isolated, purified, and characterized. After interchelation with ***liposome*** particles, these purified antigens specifically bound to the antiglycolipid ***antibodies*** present in the sera of patients with ***tuberculosis*** , resulting in the formation of a blue agglutination. This protocol clearly differentiates healthy controls and M. bovis BCG-vaccinated subjects from those with active ***tuberculosis*** . The resultant ***diagnostic*** tool, the TB Screen Test, is more economical and rapid (4 min) than other currently available products and can be used for the mass screening of a heavily afflicted population.
TI Glycolipids of Mycobacterium ***tuberculosis*** strain H37Rv are potential serological markers for ***diagnosis*** of active ***tuberculosis*** .
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the sera of patients with ***tuberculosis*** , resulting in the formation of a blue agglutination. This protocol clearly differentiates healthy controls and M. bovis BCG-vaccinated subjects from those with active ***tuberculosis*** . The resultant ***diagnostic*** tool, the TB Screen Test, is more economical and rapid (4 min) than other currently available products and can be. . .

IT Major Concepts
Infection; Clinical Chemistry (Allied Medical Sciences)

IT Diseases
tuberculosis : bacterial disease, ***diagnosis***
Tuberculosis (MeSH)

IT Chemicals & Biochemicals
glycolipids; serological markers

IT Methods & Equipment
TB Screen Test: clinical techniques, ***diagnostic*** techniques

ORGN Classifier
Mycobacteriaceae 08881
Super Taxa
Mycobacteria; Actinomycetes and Related Organisms; Eubacteria; Bacteria; Microorganisms
Organism Name
Mycobacterium bovis (species): pathogen
Mycobacterium ***tuberculosis*** (species): pathogen, strain-H37Rv
Taxa Notes
Bacteria, Eubacteria, Microorganisms

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2010 ACS on STN
AN 1997:425363 CAPLUS <<LOGINID::20100824>>
DN 127:32828
OREF 127:6345a,6348a
TI Therapeutic and ***diagnostic*** vaccine for the treatment of microbial infections
IN Pascual, David; Bond, Clifford; Burritt, James; Burgess, Don; Glee, Pati; Jutila, John; Jutila, Mark; Bargatze, Robert; Mcfeters, Gordon; Pyle, Barry; Cutler, Jim E.; Han, Yongmoon
PA Research and Development Institute, Inc., USA; Pascual, David; Bond, Clifford; Burritt, James; Burgess, Don; Glee, Pati; Jutila, John; Jutila, Mark; Bargatze, Robert; et al.
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 4

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9718790	A2	19970529	WO 1996-US18796	19961121
WO 9718790	A3	19970731		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2238262	A1	19970529	CA 1996-2238262	19961121
AU 9711226	A	19970611	AU 1997-11226	19961121
EP 869801	A2	19981014	EP 1996-942049	19961121

EP 869801 B1 20040121
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 2000503630 T 20000328 JP 1997-519932 19961121
AT 258057 T 20040215 AT 1996-942049 19961121
US 20040247611 A1 20041209 US 2004-780650 20040219
PRAI US 1995-7477P P 19951122
US 1994-247972 B2 19940523
US 1995-483558 A2 19950607
WO 1996-US18796 W 19961121
US 1998-68935 B1 19981123
AB Therapeutic peptides, vaccines and ***diagnostic*** agents are disclosed for the treatment of pathogenic infections. The agents are capable of binding to mol. address on host cell (e.g. leukocyte, endothelial or epithelial cells, nerve cells), triggering one or more signal transduction pathways and enabling selective pathogen or toxin to traffic through host tissue. The agents are microbial attachment mols. such as adhesive protein, glycoprotein, lectin, carbohydrate, ***glycolipid*** .
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
TI Therapeutic and ***diagnostic*** vaccine for the treatment of microbial infections
AB Therapeutic peptides, vaccines and ***diagnostic*** agents are disclosed for the treatment of pathogenic infections. The agents are capable of binding to mol. address on host. . . or toxin to traffic through host tissue. The agents are microbial attachment mols. such as adhesive protein, glycoprotein, lectin, carbohydrate, ***glycolipid*** .
ST microbial adhesion mol vaccine ***diagnostic*** ; monoclonal ***antibody*** microbial antigen therapeutic ***diagnostic***
IT Agglutinins and Lectins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C-type (calcium-dependent type); vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CD41a; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CD49; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Cdc42, CTP-binding protein; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Selectins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(E-; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Proteins, specific or class

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GTP-binding; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ICAM-1 (intercellular adhesion mol. 1); vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ICAM-2 (intercellular adhesion mol. 2); vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ICAM-3 (intercellular adhesion mol. 3); vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Selectins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(L-; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MAdCAM-1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(N-CAM; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Selectins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(P-; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PECAM-1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Shiga-like toxin, Escherichia coli; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Streptococcal SA I/II; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(VAM-1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(VLA; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Intestine
(adhesion of Escherichia coli; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT ***Diagnosis***
(agents; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Macrophage
(alveolar; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Lung
(alveolus, macrophage; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antigens Mac-1 (macrophage 1); vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Epithelium
Respiratory tract
(cells; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(conjugates; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Blood vessel
(endothelium, cells; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enterotoxins, Escherichia coli; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Clostridium botulinum
Clostridium tetani
(exotoxin; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(exotoxins; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT G proteins (guanine nucleotide-binding proteins)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene TC4; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT G proteins (guanine nucleotide-binding proteins)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene rab; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT G proteins (guanine nucleotide-binding proteins)
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene rac; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gp150.95; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Digestive tract
Digestive tract
(hemorrhage, microorganism causing; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Urogenital tract
(infection; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Integrins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(leucam; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Lung
(macrophage; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Sialic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(microbial adhesion mol. contg.; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Glycopeptides
Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(microbial adhesion mol.; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Agglutinins and Lectins
Ligands
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(microbial; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT ***Antibodies***
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Pharynx
(nasopharynx, epithelium and endothelium; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Nerve
(neuron; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Infection
(nosocomial; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Peptides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(oligopeptides; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)
IT Urinary tract

(pathogen; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Fungi
(phycomycetous; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Paramagnetic materials
(superparamagnetic, beads; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Escherichia coli
(uropathjogenic; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Animal cell
Animal tissue
Aspergillus
B cell (lymphocyte)
Bacteriophage
Blastomyces
Bordetella pertussis
Brucella
Candida
Candida albicans
Cell adhesion
Chlamydia
Coccidioides
Coliphage M13
Corynebacterium diphtheriae
Cowpea mosaic virus
Cryptococcus (fungus)
Cryptosporidium
Diagnosis
Entamoeba histolytica
Enterobacter aerogenes
Eukaryote (Eukaryotae)
Francisella tularensis
Fungi
Genetic vectors
Giardia lamblia
Haemophilus influenzae
Hafnia alvei
Hantavirus
Helicobacter pylori
Hepatitis virus
Histoplasma
Human adenovirus
Human coxsackievirus
Human herpesvirus
Human immunodeficiency virus
Human poliovirus
Influenza A virus
Influenza B virus
Influenza C virus
Klebsiella pneumoniae
Legionella
Leishmania
Leukocyte
Liposomes

Measles virus
Microorganism
Mumps virus
Mycobacterium ***tuberculosis***
Mycoplasma pneumoniae
Neisseria gonorrhoeae
Neisseria meningitidis
Organ, animal
Parasite
Pathogen
Pilus
Plasmodium berghei
Plasmodium falciparum
Prokaryote
Proteus (bacterium)
Pseudomonas
Pseudomonas aeruginosa
Rhinovirus
Rubella virus
Salmonella
Salmonella typhi
Salmonella typhimurium
Shigella
Signal transduction, biological
Staphylococcus
Streptococcus
T cell (lymphocyte)
Treponema pallidum
Trichomonas vaginalis
Tritrichomonas foetus
Trypanosoma
Vaccines
Vibrio cholerae
Yersinia enterocolitica
Yersinia pestis
Yersinia pseudotuberculosis
(vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Antigens
Carbohydrates, biological studies
Glycolipids
Glycoproteins, general, biological studies
Integrins
Selectins
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT ADP ribosylation factor
Adhesins
Antiserums
Chemokines

Cytokines
Glycoconjugates
Immunoglobulins
LFA-1 (antigen)
Ras proteins
Rho protein (G protein)
Toxins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Cell adhesion molecules
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vascular or VCAM; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.v; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.1.beta.1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.2.beta.1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.3.beta.1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.4.beta.1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.5.beta.1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT Integrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.alpha.6.beta.1; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT 72146-52-2, Mutan
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Streptococcal; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT 9005-32-7, Alginic acid
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(gel; vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT 59-23-4, Galactose, biological studies 63-42-3, Lactose 131-48-6, N-Acetylneuraminic acid 1811-31-0, N-Acetylgalactosamine 2438-80-4, Fucose 3416-24-8, Glucosamine 3458-28-4, Mannose 7512-17-6 7535-00-4, Galactosamine
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(microbial adhesion mol. contg.; vaccine comprising microbial adhesion

mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

IT 29350-58-1, PNAd-1
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(vaccine comprising microbial adhesion mol. antigen as therapeutic and ***diagnostic*** for microbial infections)

L11 ANSWER 3 OF 5 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN
AN 2007510106 EMBASE <<LOGINID::20100824>>
TI Rapid ***liposomal*** agglutination card test for the detection of antigens in patients with active ***tuberculosis*** .
AU Tiwari, R.P.
CS Diagnostic Division, Nicholas Piramal India Limited, Pawane, Navi, Mumbai, India.
AU Tiwari, R.P.; Garg, S.K.; Bisen, Prakash S. (correspondence)
CS Institute of Biotechnology and Allied Sciences, Seedling Academy of Design, Technology and Management, Jagatpura, Jaipur, India. psbisen@gmail.com
AU Garg, S.K.
CS Department of Biochemistry, University of Nebraska, Lincoln, NE, United States.
AU Bharmal, R.N.; Kartikeyan, S.
CS Department of Microbiology, Preventive and Social Medicine, Rajiv Gandhi Medical College, Kalwa, Thane, India.
AU Bisen, Prakash S. (correspondence)
CS Bisen Biotech and Biopharma Pvt. Ltd., M-7 Laxmipuram, Transport Nagar, Gwalior 474009, India. psbisen@gmail.com
SO International Journal of Tuberculosis and Lung Disease, (Oct 2007) Vol. 11, No. 10, pp. 1143-1151.
Refs: 30
ISSN: 1027-3719 CODEN: IJTDFO
CY France
DT Journal; Article
FS 015 Chest Diseases, Thoracic Surgery and Tuberculosis
004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
006 Internal Medicine
LA English
SL English; French; Spanish; Castilian
ED Entered STN: 30 Oct 2007
Last Updated on STN: 30 Oct 2007
AB SETTING: A total of 1360 subjects with clinically confirmed pulmonary and extra-pulmonary ***tuberculosis*** (TB) and other non-tuberculous conditions. OBJECTIVES: To develop a rapid, sensitive and specific ***diagnostic*** test for the detection of the ***glycolipid*** antigen of Mycobacterium ***tuberculosis*** in a variety of clinical samples. STUDY DESIGN: Affinity-purified rabbit anti- ***glycolipid*** ***antibodies*** (IgG) were coupled to ***liposome*** particles (0.2-0.4 .mu.m) in the presence of 1-ethyl-3-(3-dimethylaminopropyl) carbodiimide hydrochloride and N-hydroxysuccinamide to prepare the working reagent of the TB/M card test. RESULTS: ***Antibody*** -conjugated ***liposomes*** , when determined with the ***glycolipid*** antigens present in the specimens, formed a dark blue agglutination within 4 min. No dumping was observed in samples from normal healthy subjects or patients with other diseases. The test was shown to be effective in detecting ***glycolipid*** antigens of M. ***tuberculosis*** in clinical samples from patients with active TB with as low as 1 ng/ml

analytical sensitivity, 97.4% clinical sensitivity and 96.9% specificity. CONCLUSION: The TB/M card test was found to be comparatively economical (4 Indian Rupees or US$ 0.09/test), rapid (4 min) and seems fairly useful for mass testing of a variety of biological specimens (cerebrospinal, pleural and synovial fluids, serum, tissue biopsy extract) from patients with tuberculous meningitis, pulmonary TB and other extra-pulmonary TB in endemic countries. .COPYRGT. 2007 The Union.

TI Rapid ***liposomal*** agglutination card test for the detection of antigens in patients with active ***tuberculosis*** .

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CT Medical Descriptors:

adolescent
adult
*agglutination test
*antigen detection
article
cerebrospinal fluid
controlled study
    diagnostic test
    extrapulmonary tuberculosis
human
    lung tuberculosis
major clinical study
    Mycobacterium tuberculosis
pleura fluid
priority journal
school child
sensitivity and specificity
synovial fluid
    ****tuberculosis***
tuberculous meningitis
1 (3 dimethylaminopropyl) 3 ethylcarbodiimide
amide
    antibody conjugate
    glycolipid
    liposome
n hydroxysuccinamide
tissue extract

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AN 0006205491 EMBASE <<LOGINID::20100824>>
CP MEDLINE.RTM. is the source for the citation and abstract of this record.
TI [Major trends in lipid immunochemistry].
Osnovnye napravleniia immunokhimii lipidov..
AU Shvets, V.I. (correspondence); Krasnopol'skii, I.M.
SO Ukrainskii biokhimicheskii zhurnal, (1984 May-Jun) Vol. 56, No. 3, pp. 254-263.
ISSN: 0201-8470
CY Russian Federation
DT Journal; Article
FS MEDLINE
LA Russian
ED Entered STN: Mar 2010
Last Updated on STN: Mar 2010
AB Data are presented on immunochemical properties of lipids, the most important group of biologically active substances. Problems on antigenic, immunogenic and adjuvant activities of lipids are considered. A possible use of lipid antigens for ***diagnosis*** of different infectious diseases is demonstrated and main principles of their construction are suggested. Data are available on immunogenicity of phospho- and ***glycolipid*** mixtures as well as on practical application of the obtained ***antibodies*** . Guidelines for the use of immunochemical properties of lipids are outlined.
AB . . . active substances. Problems on antigenic, immunogenic and adjuvant activities of lipids are considered. A possible use of lipid antigens for ***diagnosis*** of different infectious diseases is demonstrated and main principles of their construction are suggested. Data are available on immunogenicity of phospho- and ***glycolipid*** mixtures as well as on practical application of the obtained ***antibodies*** . Guidelines for the use of immunochemical properties of lipids are outlined.
CT Medical Descriptors:
animal
article
brain
cattle
human
immunization
immunology
lung tuberculosis: DI, diagnosis
schistosomiasis: DI, diagnosis
serology
syphilis serology
cardiolipin
diagnostic agent
*epitope: AN, drug analysis
immunological adjuvant: AD, drug administration
*lipid: AD, drug administration
liposome: AD, drug administration

L11 ANSWER 5 OF 5 SCISEARCH COPYRIGHT (c) 2010 The Thomson Corporation on STN
AN 2008:599597 SCISEARCH <<LOGINID::20100824>>
GA The Genuine Article (R) Number: 292ZK
TI A novel application of affinity biosensor technology to detect ***antibodies*** to mycolic acid in ***tuberculosis*** patients
AU Verschoor, Jan A. (Reprint)

CS Univ Pretoria, Dept Biochem, ZA-0002 Pretoria, South Africa (Reprint)
AU Thanyani, Simon T.; Roberts, Vanessa; Siko, D. Gilbert R.; Vrey, Pieter
CS E-mail: jan.verschoor@up.ac.za
CYA South Africa
SO JOURNAL OF IMMUNOLOGICAL METHODS, (20 MAR 2008) Vol. 332, No. 1-2, pp. 61-72.
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DT Article; Journal
LA English
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ED Entered STN: 15 May 2008
Last Updated on STN: 15 May 2008
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB ***Tuberculosis*** has re-emerged as a global health problem due to co-infection with HIV and the emergence of drug-resistant strains of Mycobacterium ***tuberculosis*** . HIV co-infection introduced a 30% underestimation in TB ***diagnosis*** based on sputum analysis, calling for a reliable and fast serodiagnostic assay to assist in the management of TB in HIV-burdened populations. Serodiagnosis with mycobacterial lipid cell wall antigens gave promising results, in particular with LAM and cord factor. Free mycolic acids have also been considered because they are unique in structure to each species of Mycobacterium and can be economically extracted and purified. In a standard immunoassay such as ELISA, however, an unacceptable number of false positive and false negative test results were obtained. Here we report a much improved biosensor method to detect ***antibodies*** to mycolic acids in patient serum as surrogate markers of active ***tuberculosis*** . Mycolic acid (MA) ***liposomes*** were immobilized on a non-derivatized twin-celled biosensor cuvette and blocked with saponin. A high dilution of serum was used to calibrate the binding signal of the two cells, followed by contact with patient serum at a lesser dilution, but pre-incubated with either antigen-carrying, or empty ***liposomes*** . The serum, or the protein A purified IgG thereof, from sputum-positive ***tuberculosis*** patients could be inhibited from binding to the MA in the biosensor by prior incubation with MA-containing ***liposomes*** . The accuracy of the inhibition test was 84% if HIV-positive patients for whom a negative TB sputum analyses could not be relied upon to serve as a reference standard were excluded. If biosensor technology could be made suitable for high throughput screening, then it may provide the solution to the serodiagnosis of ***tuberculosis*** against a background of HIV (C) 2007 Elsevier B.V. All rights reserved.
TI A novel application of affinity biosensor technology to detect ***antibodies*** to mycolic acid in ***tuberculosis*** patients
AB ***Tuberculosis*** has re-emerged as a global health problem due to co-infection with HIV and the emergence of drug-resistant strains of Mycobacterium ***tuberculosis*** . HIV co-infection introduced a 30% underestimation in TB ***diagnosis*** based on sputum analysis, calling for a reliable and fast serodiagnostic assay to assist in the management of TB in. . . of false positive and false negative test results were obtained. Here we report a much improved biosensor method to detect ***antibodies*** to mycolic acids in patient serum as surrogate markers of active ***tuberculosis*** . Mycolic acid (MA) ***liposomes*** were immobilized on a non-derivatized twin-celled biosensor cuvette and blocked with saponin. A high dilution of serum was used to. . . the two cells, followed by contact with patient serum at a

lesser dilution, but pre-incubated with either antigen-carrying, or empty ***liposomes*** . The serum, or the protein A purified IgG thereof, from sputum-positive ***tuberculosis*** patients could be inhibited from binding to the MA in the biosensor by prior incubation with MA-containing ***liposomes*** . The accuracy of the inhibition test was 84% if HIV-positive patients for whom a negative TB sputum analyses could not. . . biosensor technology could be made suitable for high throughput screening, then it may provide the solution to the serodiagnosis of ***tuberculosis*** against a background of HIV (C) 2007 Elsevier B.V. All rights reserved.

ST Author Keywords: ***antibodies*** ; mycolic acids; biosensor; Mycobacterium ***tuberculosis*** ; serodiagnosis

STP KeyWords Plus (R): MYCOBACTERIUM- ***TUBERCULOSIS*** ; PULMONARY ***TUBERCULOSIS*** ; IMMUNE-RESPONSES; PROTEIN-A; BIOMOLECULAR INTERACTIONS; SEROLOGICAL ***DIAGNOSIS*** ; ***GLYCOLIPID*** ANTIGEN; OPTICAL BIOSENSOR; RESONANT MIRROR; IGG ***ANTIBODY***